

## NIOSH/HERB Update

National Institute for Occupational Safety and Health Division of Surveillance, Hazard Evaluations and Field Studies Health-Related Energy Research Branch

Oak Ridge Edition March 2000

## Important NIOSH Information:

 For workplace health and safety information, and the National Occupational Research Agenda (NORA) call:

1-800-35-NIOSH

http://www.cdc.gov/niosh

Review the HERB
 Occupational Re search Program Book
 online:

http://www.cdc.gov/niosh/oeindex.html

### Other Useful Links:

• Visit the DOE Former Workers Program:

http://tis.eh.doe.gov/ workers/program.html-ssi

 Visit the DOE Office of Environmental Safety and Health

http://www.eh.doe.gov/portal/

 Visit the National Council on Radiation Protection and Measurements:

http://www.ncrp.com

## CDC CENTERS FOR DISEASE CONTROL AND PREVIENTION

# Two NIOSH-Funded Studies of Workers at Oak Ridge Nearing Completion

The National Institute for Occupational Health and Safety (NIOSH) is currently conducting several occupational health studies under a memorandum of understanding between the Department of Health and Human Services and the Department of Energy (DOE) at Oak Ridge facilities. The following two NIOSH sponsored studies are nearing completion. NIOSH and the study investigators will communicate the results of the following studies to workers and management at Oak Ridge.

**Study Title:** Mortality Among Female Nuclear Weapons Workers

**Investigator:** Gregg Wilkinson, Ph.D., State University of New York.

**Study Details:** This study examined the numbers and kinds of death that occurred among 68,338 female nuclear workers who worked before 1980 at selected DOE facilities. The deaths that occurred among these workers were compared with those of the female United States population. The study attempted to see if any relationship exists between certain diseases and exposure to ionizing radiation and chemical hazards.

**DOE Sites Included in the Study:** Oak Ridge (X-10, Y-12, K-25), Los Alamos National Laboratory, The Zia Company, Rocky Flats, Hanford, Mound, Savannah River, Fernald, Pantex, and Linde (closed in 1949).

**Results:** Study results will be reported to Oak Ridge workers in May of 2000.

**For more information:** Contact Travis Kubale, M.S.W., Health Communication Specialist, NIOSH/HERB, (513) 841-4400.

**Study Title:** <u>Prevention of Stress and Health Consequences of Downsizing and Reorganization</u>

**Investigator:** Lew Pepper, M.D., Boston University School of Public Health

**Study Details:** This multi-site study looks at the effects of downsizing on organizational climate, worker health, and safety. Final reports are expected to be released in June 2000.

**DOE Sites Included in the Study:** Oak Ridge (Y-12), Pantex, Idaho National Environmental and Engineering Laboratory, Nevada Test Site, and Los Alamos National Laboratory.

**Results:** Study results will be reported to Oak Ridge workers in July of 2000.

**For more information:** Contact Larry Murphy, Ph.D., NIOSH Project Officer, (513) 533-8171.



### NIOSH/HERB Contact Points for further information...



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## **Lung Cancer Case-Control Study Initiated**

The Lung Cancer Case-Control Study has been initiated after protocol review and approval. Initial site visits with opening meetings were conducted at the Savannah River Site (SRS) and Oak Ridge National Laboratory (ORNL). Additional site visits will be conducted at the Idaho National Engineering and Environmental Laboratory (INEEL) and Hanford in April 2000.

The study question is whether there is a relationship between long-term, low level, on-the-job exposures to external radiation and deaths from lung cancer. Studies have shown that workers who are exposed to internal radiation are more likely to die of lung cancer than workers without this exposure. Whether workers who are exposed to primarily external radiation are also more likely to die from lung cancer is not clear. One problem with many previous studies of external radiation is that the workers also had other exposures to internal radiation and chemicals. When workers have other exposures in addition to external radiation, the health effects of external radiation alone are not clear. Workers in nuclear reactor areas will

be studied. These workers are mostly exposed to external radiation and are not likely to have had much exposure to internal radiation or chemicals. The potential study sites were chosen because they have large numbers of reactor area workers.

On-the-job external radiation exposure levels for each worker will be determined for this study. The study will also determine if these workers had on-the-job exposures to other possible causes of lung cancer such as chemicals and internal radiation so that the effects of these exposures can be separated from the external radiation effects. Study data will be analyzed to find out if there is a relationship between lung cancer deaths and workers' exposures to external radiation. Once all information has been collected and analyzed, the researchers will write a report of findings which will be presented to workers and management at each of the sites.

For more information about this study, please call 513-841-4400.

## Other Current Studies at Oak Ridge

#### **Leukemia Case-Control Study**

This multi-site case-control study will explore the relationship between external radiation and leukemia risk. Study Sites: Oak Ridge (X-10), Savannah River, Hanford, Los Alamos National Laboratory, Zia, and the Portsmouth Naval Shipyard (PNS).

### Multiple Myeloma Case-Control Study at the Oak Ridge Gaseous Diffusion Plant (K-25)

This case-control study among workers at the Oak Ridge (K-25) gaseous diffusion plant will explore the relationship between death from multiple

myeloma and exposures to internal ionizing radiation and chemicals.

### Exposure Assessment of Hazardous Waste, Decontamination and Decommissioning, and Clean-up Workers - Phase I

Information on potential exposures encountered by hazardous waste, clean-up, and decontamination and decommissioning workers was collected and characterized at seven DOE sites, including Oak Ridge. This Phase I study enables researchers to assess working conditions and to identify issues and research needs

at the study sites.

## Mortality Study of DOE Chemical Laboratory Workers

This is a multi-site study to determine if the risk of death among chemical laboratory workers at Oak Ridge and the Savannah River Site differs from that of the United States population or other workers at the site.

For more information about these studies, please call 513-841-4400.